

IN THE CLAIMS

- AI
1. (Original) A system for providing parallel processing of data to a plurality of digital signal processors (DSPs), comprising:
    - means for transmitting communication data to a load management system from a CPU;
    - means for selecting a digital signal processor (DSP) from a plurality of DSPs for processing the communication data;
    - means for processing the communication data using the selected DSP; and
    - means for transmitting the processed data back to the CPU and to a communication device.
  2. (Original) A system of claim 1, wherein the communication data is transmitted from a VoIP medium.
  3. (Original) A system of claim 1, wherein the communication data is transmitted from a FoP medium.
  4. (Original) A system of claim 1, wherein the communication data is transmitted from an IP to sonet medium.
  5. (Original) A system of claim 1, wherein the communication data is transmitted from an encoder/decoder.
  6. (Original) A system of claim 1, wherein the communication data is transmitted from a broadband communication medium.
  7. (Original) A system of claim 1, wherein the communication data is transmitted from an image processing medium.
  8. (Original) A system of claim 1, wherein the communication data is transmitted from a data modem.
  9. (Original) A system of claim 1, wherein the load management system comprises:

a plurality of direct memory access (DMA) devices having internal registers, a plurality of FIFOs, a plurality of state machines associated with the plurality of FIFOs, and a memory interface for interfacing the plurality of DMA devices with an external memory device;

a plurality of status and controls registers coupled to the plurality of DMA devices;

A | a CPU interface for interfacing the CPU with the plurality of status and control registers;

and

a DSP interface for interfacing the plurality of DSPs with the plurality of DMA devices.

10. (Original) A system of claim 9, wherein the DSP interface includes a program/data memory and a ping pong memory.

11. (Original) A system of claim 9 further comprising an external memory, wherein the external memory is coupled to the plurality of DSPs through dedicated memory threads.

12. (Original) A system of claim 9, wherein the CPU interface includes a routing MUX, wherein the routing MUX is coupled to the external memory device.

13. (Original) A system of claim 12, wherein the external memory device comprises a memory access controller array.

14. (Original) A system of claim 12, wherein the external memory device comprises a memory management system.

✓ 15.-32. (Cancelled).